No.



200300321

THIR UNITED STATES OF AMERICA

<u>TO ALL TO WHOM THESE PRESENTS SHALL COME;</u>

Florida Agricultural Experiment Station

There has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC PLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITIORY AS PROVIDED BY LAW, THE IT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR UNG IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE PROPAGATION OR STOCKING IT FOR ANY OF THE ABOVE OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY IN SHALL CONFORM TO THE NUMBER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEANUT

'GP-1'

In Cestimonn Mucross, I have hereunto set my hand and caused the seal of the Plant Unriety Protection Office to be affixed at the City of Washington, D.C. this twenty-fifth day of August, in the year two thousand and five.

Allest:

Commissioner Plant Variety Protoction Offi

lant Variety Protection Office Agricultural Marketing Service acretary of Agriculture

REPRODUCE LOCALLY, include form number and date on all re	productions	·	Form Approved - OMB No. 0581-0055
U.S. DEPARTMENT OF AGF AGRICULTURAL MARKETIN SCIENCE AND TECHNOLOGY - PLANT VAR	G SERVICE .	The following statements are made in according Paperwork Reduction Act (PRA) of 1995	dence with the Privacy Act of 1974 (5 U.S.C. 552a) and
APPLICATION FOR PLANT VARIETY PRO (Instructions and information collection burg	TECTION CERTIFICATE	Application is required in order to determine (7 U.S.C. 2421). Information is held confider	if a plant variety protection certificale is to be issued ntial until certificate is issued (7 U.S.C. 2426).
1. NAME OF OWNER		2. TEMPORARY DESIGNATION OR	3. VARIETY NAME
Florida Agricultural Exper	iment Station	UF98604	GP-1
4. ADDRESS (Street and No., or R.F.D. No., City, State, and	ZIP Code, and Country)	5. TELEPHONE (include area code)	FOR OFFICIAL USE ONLY
Office of Dean for Researc 1022 McCarty Hall, Univers		352-392-1784	PVPO NUMBER
P. O. Box 110200, Gainesvi	11e, FL 32611-0200	6. FAX (include area code)	200300321
	and the second second	352-392-4965	FILING DATE
 IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM ORGANIZATION (corporation, partnership, association, etc. 	OF 8. IF INCORPORATED, GIVE STATE OF INCORPORATION	9. DATE OF INCORPORATION	1 name 22 222
Florida Ag Expt Stn (Pu		NA	E005, 65 tangent
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S	S) TO SERVE IN THIS APPLICATION. (Firs	t person listed will receive all papers)	F FILING AND EXAMINATION FEES:
Dr. Daniel W. Gorbet North Florida Research and	Education Center		\$ 365200
3925 Highway 71			R DATE angust 22, 200
Marianna, FL 32446			C CERTIFICATION SEE:
			[[s 432 °°
		un experience de la companya de la Companya de la companya de la compa	E DATE June 28, 2005
1. TELEPHONE (Include area code)	12. FAX (Include area code)	13. E-MAIL	14. CROP KIND (Common Name)
850-482-9956	850-482-9917	dgorbet@mail.ifas.ufl.edu	Peanut
5. GENUS AND SPECIES NAME OF CROP		16. FAMILY NAME (Bolanical)	17. IS THE VARIETY A FIRST GENERATION HYBRID?
Arachis hypogaea L.		Leguminoseae	□ YES B NO
8. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT S (Follow instructions on reverse)		19. DOES THE OWNER SPECIFY THAT SEED CERTIFIED SEED? See Section 83(a) of	OF THIS VARIETY BE SOLD AS A CLASS OF of the Plant Variety Protection Act)
a. 🖄 Exhibit A. Origin and Breeding History of the Varie	ety in the second second second	YES (If "yes", answer items 20 and	d 21 below)
 b. \(\mathbb{Y} \) Exhibit B. Statement of Distinctness c. \(\mathbb{Y} \) Exhibit C. Objective Description of Variety 		20. DOES THE OWNER SPECIFY THAT SEED VARIETY BE LIMITED AS TO NUMBER OF	
d. X Exhibit D. Additional Description of the Variety (O)	office of the second se		
e. 🖾 Exhibit E. Statement of the Basis of the Owner's C			DATION DA REGISTERED AD CERTIFIED
f. Voucher Sample (2,500 viable untreated seeds or, verification that tissue culture will be deposited and	for luber propagated varieties,	21. DOES THE OWNER SPECIFY THAT SEED VARIETY BE LIMITED AS TO NUMBER OF	GENERATIONS?
repository)	A 有行为自然是一种基础基础。	IF YES, SPECIFY THE NUMBER 1,2,3, etc.	FOR EACH CLASS.
g. A Filing and Examination Fee (\$3,652), made payabl States" (Mail to the Plant Variety Protection Office)	e to "Treasurer of the United	I FOUNDATION I REGISTERED (If additional explanation is necessary, pleas	CERTIFIED ce use the space indicated on the reverse.)
2. HAS THE VARIETY (INCLUDING ANY HARVESTED MATE FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRAN	RIAL) OR A HYBRID PRODUCED ISFERRED, OR USED IN THE U. S. OR	23. IS THE VARIETY OR ANY COMPONENT OF PROPERTY RIGHT (PLANT BREEDER'S A	OF THE VARIETY PROTECTED BY INTELLECTUAL
OTHER COUNTRIES?		USA-Utility patent	on oil chemistry, etc.
★ YES USA, May 2003 □ IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALIFOR EACH COUNTRY AND THE CIRCUMSTANCES. (PICTURE) ★ YES USA, May 2003 □	NO E, DISPOSITION, TRANSFER, OR USE	YES IF YES, PLEASE GIVE COUNTRY, DATE O REFERENCE NUMBER. (Please use space	F FILING OR ISSUANCE AND ASSIGNED
The owners declare that a viable sample of basic seed of	the variety has been furnished with applica	ation and will be replenished upon request in acco	
for a luber propagated variety a tissue culture will be dep The undersigned owner(s) is(are) the owner of this sexua			rd uniform and stable as required in Section 42
and is entitled to protection under the provisions of Section	on 42 of the Plant Variety Protection Act.		and one of the order of the ord
Owner(s) Is(are) informed that false representation herein	can jeopardize protection and result in per	nalties	
ignature of owner and the control of	Tulet	SIGNATURE OF OWNER	
AME (Please print or type)		NAME (Please print or type)	
Daniel W. Gorbet		Richard L. Jones	
APACITY OR TITLE	DATE	CAPACITY OR TITLE DA	TE /
Professor/Breeder	July 14, 2003	Dean for Research	July 24, 2003
T-470 (02-10-2003) designed by the Plant Variety Protection Office using World	rd 2000. Replaces former versions of ST-470, which	are obsolete. (Se	e reverse for instructions and information collection burden statement)

ENERAL: To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) Completed pplication form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid ariety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it all reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432) ling fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications ill be held in the PVPO for not more than 90 days, then returned to the applicant as unfiled. Mall application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Refain one copy for your files. All items on the face of the pplication are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. DO NOT use masking materials make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance f the certificate. Certificates will be issued to owner, not licensee or agent.

> **Plant Variety Protection Office** Telephone: (301) 504-5518 FAX: (301) 504-5291

Homepage: http://www.ams.usda.gov/science/pvpo/pvp.htm

FEM 8a. Give:

(1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;

the details of subsequent stages of selection and multiplication; evidence of uniformity and stability; and

- (4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 8b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:

. (1) Identify these varieties and state all differences objectively;

(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and

- (3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 8c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 8d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease
- and the market of the following the section of the 3e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
- 9. If "Yes" is specified (seed of this variety be sold by variety name only, as a class of certified seed), the applicant MAY NOT reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See Regulations and Rules of Practice, Section 97.103).
- See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
- See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

1. CONTINUED FROM FRONT (Please provide a statement as to the limitation and sequence of generations that may be certified.)

As noted.

2. CONTINUED FROM FRONT (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety ncluding any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Foundation seed sold in May 2003

3. CONTINUED FROM FRONT (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the riety is protected by intellectual property right (Plant Breeder's Right or Patent).)

Variety effected by three U.S. Utility Patents: 1) No. 5,922,390; 2) No. 6,063,984;

3) No. 6,121,472

OTES: It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's presentative during the life of the application/certificate. There is no charge for filing a change of address. The fee for filing a change of ownership or assignment any modification of owner's name is specified in Section 97 175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the egulations and Rules of Practice.)

o avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority. For example, for agricultural and getable crops, contact: Seed Branch, AMS, USDA, Room 213, Building 306, Beltsville Agricultural Research Center-East, Beltsville, MD 20705. elephone: (301) 504-8089. http://www.ams.usda.gov/lsg/seed.html]

cording to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid QMB control number. The lid QMB control number for this information collection is observed to complete this information collection is estimated to average 3.0 hours per response, including the time for reviewing tructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

e U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, litical beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information raille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and ID). USDA is an equal opportunity provider and employe
 470 (02-10-2003) designed by the Plant Variety Protection Office with

16a. Exhibit A - Origin and Breeding History of Variety - GP-1

GP-1 (UF98604) came from a cross made in the greenhouse at Marianna, Florida in 1989. The cross was made to incorporate the "high oleic" oil chemistry in material to select for good pod yields, good grades, early maturity, tomato spotted wilt virus (TSWV) resistance, with the improved oil chemistry. A pedigree selection program was followed in the F_1 - F_6 under sprayed, high/medium management production conditions. Seed were bulked from two F_6 plants to initiate yield tests at Marianna in 1995. Yield tests began in 1996 at Gainesville.

Pedigree = $89 \times OL14-1-3-2-2-\underline{b2}-B = [(Marc I \times F435-HO) \times Marc I]$

GP-1 originated from a cross of Marc I with F435-HO and the F_1 plant was backcrossed to Marc I. Plants were selected for agronomic traits in F_2 - F_6 in space planted breeding nurseries at Marianna. GP-1 was advanced each generation from a single plant (F_1 - F_5). Selections were made in these generations among populations of F_2 - 120 to F_5 - 30 plants. Seed from two individual F_6 plants were bulked to produce the F_7 plots in yield tests. Selection was made for good agronomic type growth habit, pod yield, shape and size of pods and seed, disease resistance, and oil chemistry of the seed. GP-1 is botanically classified as *Arachis hypogaea hypogaea*. Plants of GP-1 have intermediate to semi-runner growth habit with runner size pods and seed. The branching, plant color, and center stem height are similar to Andru 93, with a light green foliage. Leaves tend to be somewhat larger than Andru 93 and Marc I. The seed of GP-1 are pink (testa) and plump, rounded to somewhat elongated, being similar to Florunner.

The F435-HO parent is a breeding line from the UF program that is an outcross/mutation selection from a Florispan derivative that has high oleic oil chemistry. This line was first reported in a 1987 article in *Peanut Science* (Norden, et al.). It has been widely used in several peanut breeding programs around the world. SunOleic 95R was the first commercial variety released with this breeding background with high oleic oil.

GP-1 has been uniform and stable since it was first put in yield tests at Marianna in 1995. All plots and seed increases since that time have proved to be uniform and stable. No evidence of variants have been noted (1995-2004).

References:

- 1) Gorbet, D. W., and D. A. Knauft. 1997. Registration of 'SunOleic 95R' Peanut. Crop Sci. 37:1392.
- 2) Gorbet, D. W., D. A. Knauft, and A. J. Norden. 1992. Registration of 'Marc I' Peanut. Crop Sci. 32:279.
- 3) Norden, A. J., D. W. Gorbet, D. A. Knauft, and C. T. Young. 1987. Variability of oil quality among peanut genotypes in the Florida breeding program. Peanut Sci. 14:7-11.

16.b.c. Exhibit B - Novelty Statement - GP-1

GP-1 is an early maturity "high oleic" seed (oil) peanut, with a spreading/intermediate growth habit. GP-1 is somewhat more resistant to TSWV than Marc I and Andru 93 but not as resistant as Georgia Green. GP-1 has shown some tolerance to *S. rolfsii*. GP-1 is most similar to Andru 93 in overall phenotype but differs in that it has high oleic (80±% oleic fatty acid, 18:1) oil chemistry of the see and Andru 93 has "normal" oil chemistry (55±% of oleic FA), (see tables 3 and 4) depending on year and location.

Exhibit C - Objective Description of Variety

GP-1 is a runner market-type peanut (*Arachis hypogaea* L.) with a semi-spreading to semi-prostrate growth habit. The lateral branches turn upward. The foliage color of GP-1 is similar to that of Andru 93, being lighter green than Florunner. Seed of GP-1 are plump, rounded to somewhat elongated with a pink testa. The 100-seed weight is about 61 g. GP-1 is more susceptible to TSWV than Georgia Green and pod yields have been about 3% less than Georgia Green in Florida tests (table 1). GP-1 has "high oleic" oil chemistry with about 80% oleic (18:1) fatty acid content in the oil (48% oil) (table 5). Data in table 4 are from tests grown in west Texas and analyzed at Texas Tech, which still shows the big difference between GP-1 and Andru 93 for oleic (18:1) and linoleic (18:2) fatty acid content of the oil in its seed.

Table 3. Fatty acid data for GP-1 vs Andru 93 in Florida tests (1997-2000).1

Year/location	Palm (16:0)	Oleic (18:1)	Linoleic (18:2)
		%	,
1997 - Marianna (2) ²			
GP-1	6.7	81.0	2.3
Andru 93	9.7	54.5	26.3
1997 - Gainesville (1)			
GP-1	6.2	81.4	1.8
Andru 93	9.4	56.8	24.4
1998 - Marianna (2)			•
GP-1	6.5	81.4	2.4
Andru 93	10.0	54.8	25.7
1998 - Gainesville (1)			
GP-1	6.3	82.4	1.6
Andru 93	8.5	65.1	16.6
2000 - Marianna (1)			
GP-1	6.7	79.5	3.1
Andru 93	8.5	56.8	22.4
2000 - Gainesville (1)			
GP-1	6.8	80.9	2.9
Andru 93	8.8	59.8	21.8

¹Data from Florida samples analyzed in University of Florida labs.
²Number in parentheses equals number of tests/sample.

U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE LIVESTOCK, FOULTRY, GRAIN & SEED BIVISION BELTSVILLE, MARYLAND 20705

OBJECTIVE DESCRIPTION OF VARIETY PEANUT (Arachis hypogaea)

NAME OF APPLICANT(S)	VARIETY NAME OR TEMPORARY
Florida Agricultural Experiment Station	DESIGNATION
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	GP-1
Office of Dean for Research	FOR OFFICIAL USE ONLY
1022 McCarty Hall, University of Florida	PVPO NUMBER
P. O. Box 110200, Gainesville, FL 32611-0200	200300324
Place the appropriate number that describes the varietal character of this variety in the	ne boxes below.
Place a zero in first box (e.g. 0 8 9 or 0 9) when number is either 99 or less of	r 9 or less.
1. BOTANICAL TYPE:	
Flowering on the Main Stem: 1 = ABSENT 2 = PRESENT	
4-A175011475 B: (
1 = ALTERNATE - Pairs of vegetative & reproductive branches (Virgi	nia) 3 = OTHER (Specify)
Branching Pattern: 2 = SEQUENTIAL Continuous reproductive branches (Valencia-Spa	inish)
Z. PLANT:	
1 = PROSTRATE (Florunner) 2 = DECUMBENT (NC-5)	= SPARSE (Valencia) 2 = MODERATE (Starr)
	3 = PROFUSE (Florunner)
3. MATURITY:	
2 Region: 1=VIRGINIA, NORTH CAROLINA 2 = S.E. UNITED STATES 3=S.	W.UNITED STATES 4=OTHER
1 2 6 NUMBER OF DAYS TO MATURITY	
T Z O NOMBER OF DATS TO MATORITY	
NO OFFICIAL PROPERTY.	
1 4 NO. OF DAYS EARLIER THAN	2 = FLORUNNER 3 = FLORIGIANT
4 = VIRGINIA	
NO. OF DAYS LATER THAN	7 = SOUTHEASTERN RUNNER 56-15
8 = OTHER (S)	pecify)
4. LEAVES:	
COLOR AT 60 DAYS: (Nickerson Color Designation): 1 = LIGHT GREEN (10Gy 6	/9) 2 = MEDIUM GREEN (2.5G 5/9)
3 = DARK GREEN (5G 4/7)	4 = OTHER (Specify)
6 7 MM. LEAFLET LENGTH (Basal leaflet of the youngest fully opened leaf)	
2 7 LEAFLET LENGTH/WIDTH RATIO	
5. POD: (Average for 20 pods at maturity)	
2 9 MM. LENGTH	AMETER
1 3	
4 3 8 6 KG./HA. POD YIELD	
2 % LESS THAN	2 = FLORUNNER 3 = FLORIGIANT
4 - VIRGINIA	61R 5 = NC - 2
% MORE THAN	7 = SOUTHEASTERN RUNNER 56-15
	pecify)_Georgia Green
1 5 % FANCY SIZE: (% riding 13.46 mm., 34/64 inch, spacing set on presizer roller)	A TELEPONE OF PROPERTY OF A STATE OF THE STA
FORM LPGS-470-29 (8-80) (Formerly Form GR-470-29 (6-17-74) which may be used)	

5. POD (Average fo	or 20 pods at mati	urity): ,							,
2 NUMBER	OF SEEDS PER	POD: 1 = 1 2 ·	= 2 3 = 3	4 = 3	_4 5 = 2 - 3 -	4	*		
2 CONSTRICTION: 1 = SHALLOW OR NONE(Virginia 56R, Argentine) 2 = MEDIUM-(Virginia 61R) 3 = DEEP (Starr)									
1 SURFACE: 1 = GLABROUS (Florunner) 2 = PUBESCENT (Florispan)									
2 BEAK:	1 × A8	SENT 2 =	INCONSPIC	uous	3 = PRON	OUNCED			
6. SEED (Mature, c	ured but not aged	():				<u></u>			
5 COAT	COLOR: 6=	,		3 = TAN 8 = DARI	(Starr) 4 = BR < PURPLE		PINK (<i>Florigia</i> n VARIGATED	11)	and the second s
1 COATSU			DENTED	1	1 = UNIFORM	COLOR	2 = BLEMIS	HED	
1 1 .	1 = SPHERIODA	•	ORT-BROAD		•	ONGATED-SL			
2	4 – CT LINDAICA	AL-TAPERED ENDS	5 = CYLIN	NDRICAL	BLUNT ENDS (A	(C-2) 5	= OTHER (Sp	ecijy)	· · · · · · · · · · · · · · · · · · ·
1 5 MM. LE	ENGTH [1 0 MM, WIDT	н [6	1	GRAMS PER	100 SEED (8%	Moisture)	•	· .
7. DISEASE RESIS	FANCE: (O = No	ot Tested, 1 = Susceptibl	e, 2 = Resista	nt}		·	· · ·	• • •	
1 SOUTHER	N STEM ROT			1	Ř UST	er er i		-	
1 EARLY LE	EAF SPOT			0	VIRUS X				
1 SOUTHER	N LEAF SPOT			0	MOSAIC	;			
1 POD ROT	COMPLEX				OTHER (Specify)	Tomato	Spotted V	Jilt V	irus
. INSECT RESISTA	NCE: (0 = Not 1	Tested, 1 = Susceptible,	2 = Resistant	· .		•		• • •	
1 THRIPS		· ·		0 1	BURROWING BU	G ·			
1 LEAF HOP	PER			0,	NEMATODE (Spe	cify species)			
0 SOUTHERN	CORN ROOTW	ORM		0 '	ESSER CORNST	ALK BORER	. ئ		
0 APHID					THER (Specify)		· · · · · · · · · · · · · · · · · · ·		
COMPARISON OF	SUBMITTED VA	ARIETY WITH ONE OF	R MORE SIM	ILAR VA	RIETIES:				
VARIETY	OIL*	PROTEIN*	OLI LINO ACID F	EIC: • LEIC RATIO	IODINE* NUMBER	SHELLING (%)	SMK**	ELK+. (X)	MAIN STEM HEIGHT (CM)
UBMITTED	48	26	28		78	79	77	16	36
MILAR	49	25	. 32		78	79	77	16	37
AME OF SIMILAR ARIETY From Sound Mature	SunOleic 97F	Georgia Green	SunOleic		SunOleic 97R	SunOleic 97R	SunOleic 97R	Georgia Green	Florunner
····		** Sound Mature Kerr MOST CLOSELY RESE			ge Kernels				
CHARACT		VARIETY	WREES THA	TSUBMI	TIED: CHARACTER		VA 6	IETV	
DO COLOR		Andru 93	<u>-</u>	SEFOL	NG VIGOR			IETY	
ED DORMANCY	ED DORMANCY Andru 93								
ED SIZE		Florunner	uj	LEAF C	OLOR		Andru 93 Andru 93		
1. COMMENTS (Ad	ditional description	on or clarification - Suc	has: Relativ	e disease :	reactions may be o	ompared with	standard varie	ties)	
GP-l is so	omewhat mor unt as Geor	e resistant th	ıan Andru	93 to	tomato sp	otted wil	t virus	but no	t

3M LPGS-470-29 (8-80) (REVERSE

16d. Exhibit D - Additional Description of Variety - GP-1

GP-1 is an early maturity runner market-type peanut variety with excellent oil chemistry (high oleic). GP-1 is about 10-14 days earlier than Georgia Green under Florida conditions. GP-1 is susceptible to TSWV, being similar to Andru 93 in resistance to TSWV.

Table 1 gives data on pod yield, grading factors, and disease ratings for 24 Florida field tests at Marianna and Gainesville (1997-2001). These data indicate that GP-1 is more susceptible to TSWV with somewhat lower pod yields than Georgia Green. Data on extra large kernels (ELK) are essentially the same for GP-1 and Georgia Green but 100-seed weights indicate that GP-1 is somewhat larger or denser.

Table 2 data are from early planted TSWV studies at Marianna, Florida, and Tifton, Georgia, under high pressure. The tests were planted in early April with four seed per foot of row. GP-1 had disease (TSWV) ratings similar to Andru 93, being more susceptible than Georgia Green. However, pod yields were greater for GP-1 compared to Andru 93 (3363 vs. 2304 kg/ha).

Table 3 gives data for seed oil chemistry of GP-1 compared to Andru 93 from Florida samples analyzed at University of Florida labs (1997-2000). These show that GP-1 has high oleic (80+%) fatty acid content compared to "normal" oleic content for Andru 93.

Table 4 gives data on studies conducted in west Texas, where TSWV is not a problem and night temperatures are lower than for Florida. GP-1 had pod yields similar to Georgia Green with lower oil content (42.9 vs. 45.2). GP-1 shows the high oleic (18:1) chemistry, similar to SunOleic 97R.

Table 5 gives data on oil chemistry for GP-1 further supporting the "high oleic" oil content. The oleic (18:1) and linoleic (18:2) content of GP-1 is very similar to SunOleic 97R, both having about 80% oleic and $2\pm$ % linoleic. GP-1 may have somewhat lower percent oil than SunOleic 97R.

Table 6 gives data from a commercial lab on seed chemistry and flavor, compared to Georgia Green. These results further support the high oleic oil chemistry of GP-1, with flavor equal to Georgia Green.

Table 7 shows data on blanching of GP-1 compared to Georgia Green, comparing samples from Florida for the 1998 and 1997 crop. GP-1 blanched essentially the same as Georgia Green.

Table 8 shows data on seed size distribution for GP-1 compared to Andru 93 and Andru II for 1998 and 1999 samples. The seed size distribution for these three varieties were very similar. However, Andru II has stronger resistance to TSWV and probably is less affected by TSWV as relates to yield and grade (including seed size).

Table 1. Data for GP-1 in Florida Tests (1997-2001)¹.

	Pod Yield			100 seed	_ Dise	ase ⁴
Entry	(lbs./A)	% TSMK ²	% ELK ³	wt. (g)	A	В
GP-1	3916	75.3	16.1	61.4	5.3	2.6
Georgia Green	4012	77.5	16.8	58.0	4.0	3.0

¹Data from 24 tests.

Table 2. Tomato Spotted Wilt Virus Studies in Florida and Georgia, 19981.

_		% Disease			Yield (kg/ha)			
Entry	GA	FL	Mean	GA	FL	Mean		
GP-1	67.1	75.8	71.5	3540	3186	3363		
Georgia Green	45.4	54.6	50.0	4396	4102	4249		
Georgia Runner	75.0	86.3	80.6	2949	2229	2588		
Andru 93	67.1	77.0	72.1	3941	666	2304		

¹Data from Dr. Albert Culbreath, University of Georgia, Tifton.

²TSMK = percent total sound mature kernels or seed riding a 16/64th inch slotted screen.

³ELK = percent extra large kernels or seed riding a 21.5/64th inch slotted screen.

⁴Disease ratings for tomato spotted wilt virus on A) 1-10 scale, 1 = no disease; B) 1-4 scale (4 = resistant).

Table 4. Data on GP-1 from West Texas Studies (1998-2000)1.

	Pod Yield	% _		%	
Entry	(kg/ha)	TSMK	Oil	18:1	18:2
GP-1	3802	73.6	42.9	76.4	7.0
Andru 93	3245	71.6	44.5	46.7	35.7
SunOleic 97R	4490	75.8	46.1	80.4	6.2
Florunner	4282	74.0	47.9	46.7	36.6
Georgia Green	4077	80.1	45.2	46.2	38.0
LSD(.05)	882	0.4			

¹Data from Mr. Brad Howell, MS program at Texas Tech University.

Table 5. Data on Oil Chemistry of GP-1 (1999-2000).

· 	% Oil Chemistry ¹					
Entry	Oil	Oleic (18:1)	Linoleic (18:2)			
		%				
GP-1	48.1	80.0	2.9			
Georgia Green	51.3	54.8	25.1			
Florunner	49.9	56.0	24.1			
SunOleic 97R	49.2	80.7	2.5			

¹Data based on 10 samples for fatty acid and four on oil.

Table 6. Quality Data on GP-1 from a Commercial Lab (1999).

_		Fatty Acids					
Entry	16:0	18:1	18:2	Oil	Sugar	Flavor	
•				%			
GP-1	6.6	77.9	2.2	52.1	4.2	5.0	
Georgia Green	9.7	51.5	26.6	53.0	3.5	5.0	

 $^{^{1}}$ Flavor scores 1-5, 5 = best.

Table 7. Blanching Data for GP-1 (1998-1999)1.

Entry	Splits	Whole	Not	Partial
		%		
GP-1	10.8	81.3	3.0	2.8
Georgia Green	8.3	82.5	3.0	3.8

¹Data from Mr. Walt Mozingo, VPI, Suffolk, VA.

Table 8. Seed Size Distribution for GP-1 (1998-1999)1.

	Percent	Percent Riding Screen Size (64th inch)					
Entry	21	18	16	14	SS	OK	Meat
				%			
GP-1	15.2	36.1	13.9	5.8	2.1	4.7	77.7
Andru II	15.5	35.5	13.2	4.9	2.9	3.5	75.4
Andru 93	12.6	31.5	14.6	6.8	2.8	5.3	73.6

¹Data based on two 5 pound in-shell samples each year.

16e. Ownership Statement - GP-1

GP-1 originates from a cross made by D. W. Gorbet in the greenhouse at Marianna NFREC in 1989. All selections were made under sprayed conditions (leafspot) with medium to high management. Seed from two F_6 plants were bulked to initiate field yield tests at Marianna in 1995. UF98604 was approved for release by the Florida Agricultural Experiment Station (FAES) in 2002 as a new high oleic, early maturity peanut cultivar, named GP-1.

Florida Foundation Seed Producers, Inc. (FFSP), has been authorized to produce breeder and foundation seed of GP-1 for commercial distribution. Only companies with an approved contract with FFSP are authorized to produce and sell seed of GP-1.

GP-1 was developed by FAES scientists (breeder). By agreement between the breeder and FAES, this invention belongs to FAES and all rights, access, and use of this invention shall be according to FAES policy. Also, GP-1 is impacted by three University of Florida utility patents on the "high oleic" oil chemistry (U.S. Patent No. 5,922,390; 6,121, 472; and 6,063,984). These latter three patents impact the commercialization of all "high oleic" peanut and such arrangement must be made with the University of Florida Foundation for marketing any such peanut cultivars.

REPRODUCE LOCALLY. Include form number and date on all reproductions.	FORM APPROVED - OMB NO	O. 0581-0055 EXPIRES: 12-31-9
U.S. DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE	The following statements are mad	e in accordance with the Privacy Act of erwork Reduction Act (PRA) of 1935.
SCIENCE AND TECHNOLOGY DIVISION - PLANT VARIETY PROTECTION OFFICE EXHIBIT E STATEMENT OF THE BASIS OF OWNERSHIP	Application is required in order to	determine if a plant variety protection 2. 2421]. Information is held confidentia
1. NAME OF APPLICANT(S) Florida Agricultural Experiment Station	2. TEMPORARY DESIGNATION OR EXPERIMENTAL NUMBER	3. VARIETY NAME
University of Florida/IFAS RAD 5/6/05	UF98604	GP-1
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country)	5. TELEPHONE (include area code)	6. FAX (include area code)
Office of Dean for Research	352-392-1784	352-392-4965
1022 McCarty Hall, University of Florida P. O. Box 110200, Gainesville, FL 32611-0200	7. PVPO NUMBER	
	200300	704
8. Does the applicant own all rights to the variety? Mark an "X" in appropriate bl	ock. If no, please explain.	X YES NO
		<u>M</u> . 20
9. Is the applicant (individual or company) a U.S. national or U.S. based company?		
If no, give name of country		X YES NO
10. Is the applicant the original breeder? If no, please answer the following:	**************************************	
		X YES NO
 a. If original rights to variety were owned by individual(s): ls (are) the original breeder(s) a U.S. national(s)? If no, give name of co 	ountry	
		<u> </u>
b. If original rights to variety were owned by a company:		X YES NO
Is the original breeder(s) U.S. based company? If no, give name of cou	intry	
11. Additional explantion on ownership (If needed, use reverse for extra space):		
D. W. Gorbet (Professor) - peanut breeder for Flo	orida Agricultural Ex	periment Station
DE STACKS MOVING.		
PLEASE NOTE:		
Plant variety protection can be afforded only to owners (not licensees) who meet o	ne of the following criteria:	
1. If the rights to the variety are owned by the original breeder, that person must of a country which affords similar protection to nationals of the U.S. for the sar		UPOV member country, or nationa
If the rights to the variety are owned by the company which employed the originationals of a UPOV member country, or owned by nationals of a country which genus and species.		
3. If the applicant is an owner who is not the original breeder, both the original breeder.	eeder and the applicant must me	et one of the above criteria.
		·
The original breeder may be the individual or company who directed final breed definition.	aing. See Section 41(a)(2) of t	the Light Agusta Lioraction Wer in

Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter.

Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs). Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotage, etc.) should contact the USDA Office of Communications at (202) 720-2791.

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, D.C. 20250, or call (202) 720-7327 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.